AMENDMENTS TO THE SPECIFICATION

Page 1, before BACKGROUND, insert:

This application is a continuation of Application No. 09/684,907, filed October 10, 2000, the subject matter of which is incorporated by reference herein.

Please amend the paragraph at page 4, line 3 as follows:

Figs. 21a and 21b is an are exemplary illustrations of a Project Information Management display in accordance with a preferred embodiment of the invention;

Please amend the paragraph at page 4, line 5 as follows:

Figs. 22a and 22b is an are exemplary illustrations of a Sales-Representative Information Management display in accordance with a preferred embodiment of the invention;

Please amend the paragraph at page 4, line 7 as follows:

Figs. 23a and 23b is anare exemplary illustrations of a Client/Customer Information Management display in accordance with a preferred embodiment of the invention;

Please amend the paragraph at page 9, line 1 as follows:

However, a rule-based expert system requires that the inverse rule must be written separately if it is deemed necessary. If the product knowledge being modeled is complex, the required rules and inverse rules can grow into a very larger number. In

addition, applying this type of knowledge representation to the problem "the user has answered options A, B, C with attributes x, y, z; now what are the legal attributes for this other option D?" involves using an interpreter or compiler that understands the rule syntax so as to apply the rules to the problem.

Please amend the paragraph at page 12, line 12 as follows:

Two more sets of rules will still have to be written for the Color screen and the Number screen. The difficulty of adding a new person to the data or, adding another class of question (e.g., to determine the group's favorite fruit) can easily be seen. It is also useful to remember that this sample data is intended to be a trivial example. In contrast, the Product Knowledge Builder would permit the entry of that same data as follows.

Please amend the paragraph at page 12, line 17 as follows:

After adding the fourthree questions to the system, add the following compound slot:

Please amend the paragraph beginning at page 18, line 18 to page 19, line 7 as follows:

The Parametric Drawing Engine can also export its drawings in other for use in other applications (e.g., AutoCAD, in the event that the parametric drawing will be used by an architect). The Parametric Drawing Engine may also tie into other modules such as a Schematic Configurator. The Schematic Configurator is a user interface module and inference tool. Using the Schematic Configurator, the user can view a line drawing representing a configured product (e.g., window) on the user interface, and add other units to the product. Thus, the end user might start out with a single unit

4

and he/she might then add two flanking windows, one on either side of the product. The user can designate which ~~to~~ sides to add windows and can even add other product types, such as a round-top window above. The Schematic Configurator can interface with the Frame Engine 104, seeking matching components to the previously selected configuration. Frame Engine 104 will match appropriate products between the two modules based on any number of product attributes and parameters.

Please amend the paragraph at page 23, line 12 as follows:

Other products can be added to a product already displayed in the SC with three different methods: 1) the Copy function, which creates an exact copy of the selected item; 2) the New Component function, which calls the Selection and Configuration display (Fig. 3) for the configuration of an entirely new unit to be added to the existing unit; and 3) the Design option 38~~,~~ described below.

Please amend the paragraph at page 24, line 6 as follows:

Referring now to Fig. 10, this exemplary embodiment of the invention can incorporate a Catalog Page feature. The Catalog Page feature displays dimensional attributes whose ranges can be shown in tabular form. Its format is derived from printed product information sources that display such dimensional variables. Catalog Page Drawings 40 provide the user with graphic parametric representations using the widths and heights of the class of products being selected. Unit ~~30~~ heights 42 will be displayed down the side of the selection box and the widths 44 will be across the top of the array. This feature clarifies dimensional information presented in text form and provides visual feedback with respect to the scale and size of selected products.

Please amend the paragraph at page 25, line 1 as follows:

Referring to Fig. 12, a Custom Shapes Editor allows the user to size custom shaped products. The example shown in Fig. 10 directly applies to windows and doors, but may apply to any customizable product. The Editor is automatically opened when a custom shape product is selected as a product category. The Custom Shapes Editor is generally used in conjunction with Catalog Pages to select the general product shape (see Fig. 10) and permits the user to select and specify any combination of dimensional parameters 48 within the engineering limits set by the manufacturer. The Editor also displays a parametric representation of the custom product for inclusion on quotations. All pricing formulas relating to, for example, glass size, glass area, grille patterns and types, frame side lengths, and other parameters 48, can be driven with the Custom Shapes Editor.

Please amend the paragraph beginning at page 25, line 19 to page 26, line 7 as follows:

Referring to Fig. 14, A<u>a</u>n accessories module is<u>may be</u> added containing product accessories 54 supplied by the manufacturer in conjunction with its primary products. The accessories module can include lineal products (e.g., extension jambs, molding, mull covers, etc.) as well as individual or boxed parts and components (handles, hinges, operators, etc.). This module can also be used to add accessories 54 to a quote that are purchased from other sources. Such additional items are added by entering text descriptions in a text box along with the prices for such items. All accessories 54 entered through the module appear on the quote as individual line items. Functionality can also be included to price accessories that are configurable (i.e., items which are defined by attributes displayed and represented in the Selection and Configuration display (Fig. 3)). These accessories or replacement items require product

knowledge description and definition similar to primary products and present the user with relevant questions and answers as already described.

Please amend the paragraph at page 28, line 15 as follows:

Referring to Figs. 21a and 21b, this exemplary embodiment can include a project database, which maintains and tracks information that is unique to a particular project. The project database contains the sales or customer service representative's name 68, relevant customer information 70 and project information 72 for that particular project. When a new project is created, information from associated databases for sales-representatives and customers is available through drop-down boxes. Fields for Terms of Payment, PO Number, Price Multiplier, and Project name are available, as well as the Line Item Adjust function (Fig. 15). Projects are categorized as Current or Archived and can be moved between these categories as necessary. When a Project is highlighted in the Project window, all units in that project are displayed. Interfaces to contact management systems, sales systems and sales force automation systems can also be engineered on request. The system allows for record additions, changes to existing records, deletion of records, and duplication of records.

Please amend the paragraph at page 29 line 5 as follows:

Referring to Figs. 22a and 22b, the system can also include a Sales-Representative database, which controls all information for sales-representatives. These items are ID# 76, Name 78, Territory 80, phone number 82 and fax number 84. The system allows for record additions, changes to existing records, deletion of records, and duplication of records. The Customer list for each sales-representative can be viewed by selecting a specific sales-representative name in the listing.

Please amend the paragraph at page 29, line 11 as follows:

Referring to Figs. 23a and 23b, this exemplary embodiment of the invention can also include a Customer database to control all information for customers. These items are ID# 76a, Name 78a, separate billing 80a and shipping Addresses, Contact name 78b, Customer type 86, and miscellaneous defaults. The system allows for record additions, changes to existing records, deletion of records and duplication of records. Customers are displayed in a listing which includes the sales-representative for each customer.

Please amend the paragraph beginning at page 31, line 14 to page 32, line 2 as follows:

Referring now to Fig. 26, flow chart 300 illustrates how another exemplary implementation of a preferred embodiment of the invention can be employed by a sales-representative/user in ordering sales for customers/users in the field. After the program is started at Sstep 302, the sales-representative will call on new or existing customers to investigate prospective business. The sales representative can then run the system and start a project. At step 304, the representative would initiate the project (Step 304) and a list of all projects would be displayed. The representative can then initiate a new project at step 308. Alternatively, the system could remain in a "wait" mode 306 until the project button is initiated. Once the project button is initiated, the sales-representative can then type in the client's name and address, and other pertinent information at step 310. Once the client information is entered then the user is presented with a configuration screen (step 312) that can be used to begin adding product information.

Please amend the paragraph at page 32, line 3 as follows:

8

The manner in which a product is entered consists of the user inputting into the system a request for a new "mark." A "mark" refers to a configured unit or product such as a window, door, or other assembly. The user can then select a product type, such as a window, at step 314. The user can then begin to configure a new mark and at that point is prompted to answer some questions about the product at step 315 such as the type, size, or style of window desired. The sales-representative/user can input the specific product information, for example, color options, glass type, etc. At step 318, the sales-representative can select a quantity of product for the project. As a result, the system will repeat (320) the same configuration for the number of windows entered in the Quantity data field.

Please amend the paragraph at page 32, line 13 as follows:

At step 322, the user can create custom composite units. At this point, the user would enter the Schematic Configurator and choose the composite elements for the configurator to construct at step 324. Once the custom configuration is complete, or if the custom composite step is bypassed (323), the user can initiate a quote button at step 326, which enables the calculation of a price quote for the products currently defined by the project. The quote can contain individual descriptions of each product selected in preceding steps with all associated pricing, along with a drawing of each product with any custom composite units. Moreover, the information can be displayed, printed, presented or otherwise output together or separately at step 328. At step 330, the system would provide a price total and a total quote for the project.

Please amend the paragraph at page 33, line 1 as follows:

Fig. 27 illustrates another exemplary implementation of a preferred embodiment, in which a dealer distributor adds individual sales representatives to the

database at step 402. Customer names will then be added at step 404. The system will then check whether all customers have been added at step 406. If not, then it will loop back to add more names at step 408. Once all customers have been added to the database at step 410 , the system will query whether the same thing has been done for sales representatives at steps 412, 414, and 416. Once this data has been added, then the system will generate the customer database sales report. Once completed, this program will end.

Please amend the paragraph at page 33, line 9 as follows:

Another exemplary implementation of a preferred embodiment is shown in Fig. 28. Upon initiating a product customization, the user can create a project 450 (step 450). A product can be selected (step 452) to be configured for that project. The product can be configured by accessing the Schematic Configurator (step 454) to create a custom composite product. This step 454 can be repeated 458 until all the products for a specific project have been configured at step 456. Upon completion of configuration of all products for the project 460, additional projects may be created by returning to step 450 (464). Once all projects have been created and all products for these projects have been selected and configured (step 462), the user moves on 466 in the system by accessing the Generator for Output Reports (step 468), whereby schedules, CAD drawings, Technical Specification Sheets, etc. can be created as hard copies (step 470). After the generation of output reports, the user can export CAD Details to CAD software (step 472). Before exiting the system, the user can transmit the project and all related information regarding the project to a dealer for a price quote (step 474), which can also be printed as a hard copy.

Please amend the paragraph at page 34, line 1 as follows:

Another exemplary implementation of a preferred embodiment is shown in Fig. 29. In this exemplary embodiment, a user/sales-representative can initiate configuration of products in at least three ways: by taking a Telephone Sales and Order Entry (step 480), by Receiving a printed order form (step 482), and by Importing electronic project CIP (or other text format) (step 484). If a Printed order form is received (step 482), or Telephone Sales and Order Entry is taken (step 480), the sales-representative proceeds to create or select the customer from the Customer Database (step 486). Next the sales-representative can Create or Append a project for that customer (step 488). A desired product can be configured for that project (step 489). This step can be repeated 492 until all the desired products for that customer or customer's project have been configured. Once all the products have been configured 494, the sales-representative can decide whether or not all the projects have been added for that customer (step 496). If they have not (step 498), the sales-representative can return to step 488 and create or access additional projects. If all the projects have been attended to 500, the sales-representative can determine if all customers have been added. If additional customers need to be added to the system or accessed within the system, the sales-representative can return 504 to step 486 to create new files or select customers from the database, and then repeat the aforementioned steps. After all customers have been attended to, the user can transmit a product code (e.g., End Item Code) to back-end manufacturing and/or ERP systems before exiting the system.

Please amend the paragraph beginning at page 34, line 20 to page 35, line 4 as follows:

If, as shown in Fig. 29, the user imports electronic Project CIP (or other text format), the user can access *Integrated Manufacturing Software* and move on to determine if the Version Control (VC) Number is correct in step 506. If not, the user can verify by telephone at step 480, and progress therefrom throughout the system as discussed

above. If the VC Number is correct 510, the user can then add the order to any of the Sales Representative, Customer, Project, or Mark Databases (step 512). Next the user/sales-representative can Transmit the End Item Code to the back-end manufacturing and/or ERP systems (step 514).

Please amend the paragraph beginning at page 35, line 5 to page 35, line 17 as follows:

In accordance with a preferred embodiment, the functions, features and architectures described above can be part of a network available to enable business-to-business commerce over the Internet. In accordance with a preferred embodiment of the invention, an Internet portal (and a corresponding method) is provided to be the center of a selected vertical market in a particular industry or collection of industries (e.g., fenestration, or windows and doors as exemplified above). The portal can be an Internet focal point for the participants in the vertical market. The portal can not only incorporate the configuration system described above for use by participants in the portal, but also can be a virtual space for industry news and information as well as a means for facilitating commerce by and between the participating manufacturers, dealers, distributors, and retail customers making up the vertical market, as shown in Fig. 30. In a preferred embodiment, Web server software such as Bondware by EdgeNet Media, Inc., Bondware, Inc., which is a partially-owned subsidiary of EdgeNet, Inc., the details of which are incorporated herein by reference, may be used to implement the Internet portal.

Please amend the paragraph at page 36, line 10 as follows:

In accordance with a preferred embodiment of the invention, one or more processor-based systems are used to implement the modules described or apparent

from the description herein and to perform the functionality described (or inherent) herein. For each such system, one or more processors (e.g., central processing unit (CPU)) are provided for execution of one or more computer programs stored on any (one or more) known recording mediums. The processor(s) perform, control, or at least inform the various processing steps performed by the system in sending and retrieving data to and from at least one user interface and/or network. A user interface may be connected directly to a bus or remotely connected through a network (e.g., Internet). The network represents (wired or wireless) connection of two or more devices, whether directly or indirectly connected (e.g., directly coupling through cable, indirect coupling through one or more hubs or servers, whether the network is local to the processor-based system, geographically remote from the system, or a distributed combination of local/remote network components).

Please amend the paragraph at page 37, line 10 as follows:

While preferred embodiments of the invention have been described and illustrated, it should be apparent that many modifications to the embodiments and implementations of the invention can be made without departing from the spirit or scope of the invention. Although the configuration system (and corresponding method) has been specifically described in connection with the configuration of a window/door product, it should be apparent that the system (and method) can be applied to any product, service, or component that is to be designed or configured such as cabinets, rooms, houses, cars, landscape designs, clothing, etc.

13